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10/634,203	08/05/2003	Takahisa Kamataki	2107.68186	6789

7590 07/25/2006	EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/634,203	KAMATAKI, TAKAHISA
	Examiner	Art Unit	
	Joseph Schell	2114	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>05 August 2003</u>.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-22</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-22</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>05 August 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Detailed Action

Claims 1-22 have been examined.

Claims 1-22 have been rejected.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1.   Claims 1, 3, 5-8, 11, 13-15, 18-19 and 22 are rejected under 35 U.S.C. 102(e) as

being anticipated by Numata (US Patent 6,931,525).

2.   As per claim 1, Numata ('525) discloses an information processing device

connectable to a network including one or plural computers, comprising:

a first storage that stores first basic software to be executed by said information

processing device in a case where an operating mode is a first operating mode (as

shown in figure 5, either one of two operating systems are run (s14 and s19) and in

figure 7, one operating system is stored across a network and the other locally

(elements 52 and 94));

a second storage that is provided separate from said first storage and stores

second basic software to be executed by said information processing device in a case

where the operating mode is a second operating mode (as shown in figure 5, either one

of two operating systems are run (s14 and s19) and in figure 7, one operating system is

stored across a network and the other locally (elements 52 and 94)); and

a processing unit that makes a boot program operate and also makes said first

basic software or said second basic software operate (Figure 7, element 62),

said boot program making said information processing device recognize whether

the operating mode is said first operating mode or said second operating mode, said

processing unit making said first basic software or said second basic software operate

based on the recognition of the operating mode (column 2 lines 54-62, an input signal is

detected to put the system into a first state, where it loads a first operating system,

otherwise the system goes into a second state where it loads a second operating

system),

said second basic software including software that makes the information

processing device read-in data via the network (column 8 lines 26-30, the operating

system is read-in over a network connection).

3.   As per claim 3, Numata ('525) discloses the information processing device of

claim 1, wherein said second basic software includes software for restoration and/or

update of said first basic software or a system developed in said first storage or for a

device diagnosis (column 6 lines 14-17, the second operating system performs

checking and recovery of the first operating system).

4.   As per claim 5, Numata ('525) discloses the information processing device of

claim 1 further comprising a mode selection part that selects said operating mode,

wherein said first operating mode or said second operating mode is selected by said

mode selection part (column 6 line 66 through column 7 line 2, the input detection and

mode selection is performed by the BIOS).

5.   As per claim 6, Numata ('525) discloses the information processing device of

claim 1, wherein said boot program includes software that selects said first basic

software or said second basic software based on recognition of whether a selected

operating mode is said first operating mode or said second operating mode (column 6

line 66 through column 7 line 2, the input detection and mode selection is performed by

the BIOS).

6.   As per claim 7, Numata ('525) discloses the information processing device of

claim 1, wherein said processing unit performs restoration or update of said first basic

software by means of software offered from an opposite device on said network, under

execution of said second basic software (column 8 lines 25-29, the second OS is across

a network, and column 6 lines 13-16, the second OS performs checking and recovery of

the first OS).

7.   As per claim 8, Numata ('525) discloses the information processing device of

claim 1, wherein said second basic software includes a program that performs

restoration or update of said first basic software by means of software offered from an opposite device on said network (column 8 lines 25-29, the second OS is across a network, and column 6 lines 13-16, the second OS performs checking and recovery of the first OS).

8.   As per claim 11, Numata ('525) discloses the information processing device of claim 5, wherein said mode selection part is a change-over switch that changes over said operating mode (column 2 lines 56-62).

9.   As per claim 13, Numata ('525) discloses the information processing device of claim 5 further comprising an indicating part that indicates the selected operating mode (column 2 lines 56-62, the mode is indicated by which OS boot source is used).

10.   As per claim 14, this claim recites the limitations found in claim 7 (and its parent claim 1) and is rejected on the same grounds as claim 7.

11.   As per claim 15, Numata ('525) discloses the recovery method of the information processing device of claim 14, wherein said second basic software includes:

        processing that specifies the opposite device for the information processing device from the computers on the network (column 8 lines 25-29, the first and second software systems communicate over a network. Both inherently specify the device being communicated with); and

processing that receives the offer of the software from the specified opposite

device and performs the restoration or the update of said first basic software or the

system developed in said first storage (column 6 lines 14-17, the second operating

system performs checking and recovery of the first operating system).

12.   As per claim 18, Numata ('525) discloses the recovery method of claim 14 or 15,

wherein said boot program includes processing that selects said first basic software or

said second basic software based on recognition of whether the selected operating

mode is said first operating mode or said second operating mode (column 6 line 66

through column 7 line 2, the input detection and mode selection is performed by the

BIOS).

13.   As per claim 19, Numata ('525) discloses the recovery method of claim 14 or 15,

wherein said second basic software includes processing that performs the restoration or

the update of said first basic software by means of the software offered from the

opposite device on said network (column 8 lines 25-29, the second OS is across a

network, and column 6 lines 13-16, the second OS performs checking and recovery of

the first OS).

14.   As per claim 22, Numata ('525) discloses the recovery method of claim 14 or 15

further including indication processing that indicates the selected operating mode

(column 2 lines 56-62, the mode is indicated by which OS boot source is used).

Claim Rejections – 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15.   Claims 2 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Numata ('525) in view of Wikipedia's IP Address article.

16.   As per claim 2, Numata ('525) discloses the information processing device of

claim 1. Numata ('525) discloses the use of a network to connect to a second OS for

debugging (column 8 lines 26-30). The second software's use over the network clearly

requires some form of communication protocol, but Numata ('525) does not expressly

disclose the device wherein the second basic software includes software that makes the

information processing device give an IP address in accordance with a requirement of a

client via the network.

Wikipedia's IP Address teaches general information regarding and use of IP addresses.

At the time of invention it would have been obvious to a person of ordinary skill in the art

to modify the system disclosed by Numata ('525) such that the second software

requires the first software to use an IP address for network communication. This

modification would have been obvious because the addresses are needed for host

enumeration and routing on a network (Wikipedia's IP Addresses, second paragraph).

17.   As per claim 17, this claim expresses the same limitations as claim 2 and is

rejected under the same reasoning.

18.   Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Numata

('525).

Numata ('525) discloses the information processing device of claim 1 wherein the

second basic software operating in a case where the operating mode is said second

operating mode (as shown in figure 5, either one of two operating systems are run (s14

and s19) and in figure 7, one operating system is stored across a network and the other

locally (elements 52 and 94). For the purposes of this claim, the first software is the

remote software while the second software is the internal system software. As the

parent claim did not specify any differences between the two (save that the second

software reads network data, which both network systems do in order to communicate)

no limitations of claim 1 are invalidated by this switch).

Numata ('525) disclose that the boot program is stored in BIOS (column 61 lines 23-25)

and does expressly disclose the device wherein said second storage stores said boot

program.

At the time of invention it would have been obvious to a person of ordinary skill in the art

to modify the system disclosed by Numata ('525) such that the boot program run from

BIOS is instead run from the memory associated with the second storage (the storage

internal to the device). This modification would have been obvious because BIOS are

commonly copied to RAM because the system can access RAM more quickly.

Additionally, RAM generally provides greater storage space than BIOS alone (BIOS are

often only a few kilobytes), which would be useful for complex boot procedures.

19.   Claims 9 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Numata ('525) in view of Liu (US Patent 6,009,541).

20.   As per claim 9, Numata ('525) discloses the information processing device of

claim 1. Numata ('525) does not explicitly disclose the device wherein said first basic

software includes a program for restoration or update of said second basic software or

for a device diagnosis.

Liu ('541) teaches a system wherein at boot a diagnostic routine is run that thoroughly

tests system components (as shown in Figure 1 and column 2 lines 25-29).

At the time of invention it would have been obvious to a person of ordinary skill in the art

to modify the system disclosed by Numata ('525) such that when the device is booted, a

device diagnosis is performed as done by Liu ('541). This modification would have

been obvious because performing testing more extensive than most BIOS testing allows

for the detection of malfunctioning components (Liu ('541) column 2 lines 7-10).

21.   As per claim 20, this claim recites the same limitation as claim 9 and is rejected

on the same grounds as claim 9.

22.   Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Numata

('525) in view of Wikipedia's Flash Memory and EEPROM.

Numata ('525) discloses the information processing device of claim 1. Numata ('525)

does not expressly disclose the device wherein said second storage is a flash memory.

Wikipedia' Flash Memory teaches that Flash is a enhanced form of EEPROM.

Wikipedia's EEPROM teaches general EEPROM info.

At the time of invention it would have been obvious to a person of ordinary skill in the art

to modify the system disclosed by Numata ('525) such that the second storage is a flash

memory. This modification would have been obvious because an EEPROM retains its

data when power is removed (see Wikipedia's EEPROM, first paragraph) and Flash

Memory is an improved version of EEPROM that allows multiple memory locations to be

written in one programming operation.

23.   Claims 12, 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Numata ('525) in view of Moshayedi (US Patent Application Publication

2005/0044454).

24.   As per claim 12, Numata ('525) discloses the information processing device of

claim 1. Numata ('525) does not expressly disclose the system wherein the second

software has diagnosis software for said first storage, and makes recovery processing

stop in a case where a failure is occurring in said first storage.

 Moshayedi ('454) teaches a host that examines a storage system for indications of

failure and takes a preemptive action, including shutting the storage down, when such

indications exist (see abstract).

At the time of invention it would have been obvious to a person of ordinary skill in the art

to modify the information processing device disclosed by Numata ('525) such that the

second software (separately stored) can diagnose the first software storage and if

necessary stop the first software. This modification would have been obvious because

unanticipated system failures can cause data loss (Moshayedi ('454) paragraph 12).

25.   As per claims 16 and 21, these claims express the same limitations as claim 12

and are rejected on the same grounds as claim 12.

Conclusion

The prior art made of record on accompanying PTO 892 form and not relied upon is

considered pertinent to applicant's disclosure. Specifically, Von Ahnen ('717) teaches a

system where a slave processor is caused to boot to a self-test ROM or to execute a

networked application, Wolff ('625) teaches a system wherein a network bootable

device downloads test routines from a server, Bramley ('340) teaches a disk diagnostic

system stored within a BIOS ROM, Feldman ('663) teaches a backup BIOS stored on

flash wherein the flash BIOS are normally used and restored from a ROM when a error

is detected, and Kuo ('624) teaches a system that employs 2 memories wherein the first

memory debugs the second memory.

Contact Information

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Joseph Schell whose telephone number is (571) 272-

8186. The examiner can normally be reached on Monday through Friday 9AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Scott Baderman can be reached on (571) 272-3644. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SCOTT BADERMAN
SUPERVISORY PATENT EXAMINER

JS